Form PTO-1449 (modified)
Lip of Patents and Publications
For Applicant's Information
Disclosure Statement

ATTY. DKT. NO. 5659-03300

SERIAL NO. 09/841,310

APPLICANT: Wellington et al.

CONFIRMATION NO.: 5964

FILING DATE: April 24, 2001

OTHER ART

GROUP: 1764

EXAM. INITIALS	DES.	OTHER ART (including Author, Title, Date, Pertinent Pages, etc.)
	SOAC-01	U.S. Patent and Trademark Office, "Office Communication" for Application No. 10/279,226 mailed September 13, 2004 (23 pages).
	NOA 01	U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/840,936 mailed October 9, 2004 (7 pages).

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DATE CONSIDERED: 12/13/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Page 1 of 1 (modified)

Information Disclosure Statement-PTO 1449

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List of Patents							
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Disclosure Stat	tement \	·		FILING DAT	ΓE: April 24, 2	001	GROUP: 1764
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EXAM. INITIALS	DES.				, Title, Date, P		
	SOA-101	Mailed Sept	ember 1	3, 2004 (23 pa	ges).		on" for Application No. 10/279,226,
(00)	DD-01	Shreve, Nor 1967, pp. 31		HEMICAL PR	ROCESS INDU	JSTRIE	S, Third Edition, McGraw-Hill, Inc.,
							
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EXAMINER: DATE CONSIDERED: 12/13/04

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SERIAL NO. 09/841,310 ATTY. DKT. NO. 5659-03300 Form PTO-1449 (modified) List of Patents and Publications CONFIRMATION NO.: 5964 APPLICANT: Wellington et al. For Applicant's Information Disclosure Statement FILING DATE: April 24, 2001 GROUP: 1764 OTHER ART EXAM. REF. OTHER ART (including Author, Title, Date, Pertinent Pages, etc.) DES. U.S. Patent and Trademark Office, "Office Communication" for Application No. 09/841,296 GAA-01 mailed August 10, 2004 (3 pages).

EXAMINER: Sum Division

DATE CONSIDERED: 12/13/64

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Page 1 of 1 (modified)



Electronic Version v18
Stylesheet Version v18.0

Title of Invention IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application Number:

09/841310

Confirmation Number: 5964

First Named Applicant:

Scott Wellington

Attorney Docket Number: 5659-03300

Art Unit:

1764

Examiner:

Thuan D. Dang

Search string:

(6698515 or 6702016 or 6708758 or 6712135 or 6712136 or 6712137 or 6715546 or 6715547 or 6712549 or 6712548 or 6719047 or 6722431 or 6722430 or 6722429 or 6725920 or 6725921 or 6725928 or 6729397 or 6729396 or 6729401 or 6729395 or 6732794 or 6732796 or 6736215 or 6739394 or 6739393 or 6742593 or 6742587 or 6742589 or 6742588 or 6745837 or 6745831 or 6749021 or 6752210 or 6758268 or 6763886 or 6769485 or 6769483 or 6581684 or 6588504 or 6588503 or 6591906 or 6591907 or 6607033

or 6609570 or 6688387 or 6761216 or

20040069486 or 20040015023 or 20030213594

or 20040040715 or 20040020642 or

20040108111).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

injt	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	6698515	2004-03-02	Karanikas et al.			
	2	6702016	2004-03-09	de Rouffignac et al.			
	3	6708758	2004-03-23	de Rouffignac et al.]		
	4	6712135	2004-03-30	Wellington et al.]		
	5	6712136	2004-03-30	de Rouffignac et al.			
	6	6712137	2004-03-30	Vinegar et al.			
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Kn	7	6715546	2004-04-06	Vinegar et al.
	8	6715547	2004-04-06	Vinegar et al.
	9	6715549	2004-04-06	Wellington et al.
	10 6715548		2004-04-06	Wellington et al.
	11	6719047	2004-04-13	Fowler et al.
	12	6722431	2004-04-20	Karanikas et al.
	13	6722430	. 2004-04-20	Vinegar et al.
	14	6722429	2004-04-20	de Rouffignac et al.
	15	6725920	2004-04-27	Zhang et al.
	16	6725921	2004-04-27	de Rouffignac et al.
	17	6725928	2004-04-27	Vinegar et al.
	18	6729397	2004-05-04	Zhang et al.
	19	6729396	2004-05-04	Vinegar et al.
	20	6729401	2004-05-04	Vinegar et al.
	21	6729395	2004-05-04	Shahin et al.
	22	6732794	2004-05-11	Wellington et al.
	23	6732796	2004-05-11	Vinegar et al.
	24	6736215	2004-05-18	Maher et al.
	25	6739394	2004-05-25	Vinegar et al.
	26	6739393	2004-05-25	Vinegar et al.
	27	6742593	2004-06-01	Vinegar et al.
	28	6742587	2004-06-01	Vinegar et al.
	29	6742589	2004-06-01	Berchenko et al.
	30 ·	6742588	2004-06-01	Wellington et al.
	31	6745837	2004-06-08	Wellington et al.
	32	6745831	2004-06-08	de Rouffignac et al.
	33	6749021	2004-06-15	Vinegar et al.
	34	6752210	2004-06-22	de Rouffignac et al.
	35	6758268	2004-07-06	Vinegar et al.
	36	6763886	2004-07-20	Schoeling et al.
	37	6769485	2004-08-03	Vinegar et al.
	38	6769483	2004-08-03	de Rouffignac et al.
	39	6581684	2004-06-24	Wellington et al.
	40	6588504	2004-07-08	Wellington et al.
	41	6588503	2004-07-08	Karanikas et al.
	42	6591906	2004-07-15	Wellington et al.

APP_ID=09841310 Page 2 of 3



W	43	6591907	2004-07-15	Zhang et al.
$\overline{\square}$	44	6607033	2003-08-19	Wellington et al.
	45	6609570	2003-08-26	Wellington et al.
	46	6688387	2003-02-10	Wellington et al.
	47	6761216	2004-07-13	Vinegar et al.

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
ixi	1	20040069486	2004-04-15	Vinegar et al.			
	2	20040015023	2003-11-20	Wellington et al.]		
	3	20030213594	2003-11-20	Wellington et al.]		
	4	20040040715	2004-03-04	Wellington et al.]		
	5	20040020642	2004-02-05	Vinegar et al.]		
	6	20040108111	2004-06-10	Vinegar et al.]		

/ Examiner Name	Date
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Form PTO-14			ATTY.	DKT. NO. 5659-0330	0 SERIAL NO. 09/841,310
List of Patents	and Public	etions			
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7801	GOA-01	U.S. Patent			nication" for Application No. 09/841,296,
Cylin .	GOA-01	imailed June	13, 2003 (8 page	s).	
1 1	GOA-02				nication" for Application No. 09/841,296,
	307.02		26, 2004 (8 page		
1	GOA-03				nication" for Application No. 09/841,289,
		Mailed May	7, 2003 (8 pages)). ************************************	
l. 1	GOA-04				nication" for Application No. 09/841,289,
		Mailed Octo	ber 17, 2003 (7 p	ages).	nication" for Application No. 09/841,289,
† 1	GOA-05		and 1 rademark Of ary 6, 2004 (3 pag		neation for Application No. 097641,269,
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Page 1 of 1 (modified)



Electronic Version v18
Stylesheet Version v18.0

Title of Invention IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application Number:

09/841310

Confirmation Number:

5964

First Named Applicant:

Scott Wellington

Attorney Docket Number: 5659-03300

ECEN 02200

Art Unit:

1764

Examiner:

T. D. Dang

Search string:

(3004596 or 3342258 or 3455383 or 3501201

or 3502372 or 3759574 or 4160479 or 4375302

or 4483398 or 4815790).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

	脥	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
\P		1	3004596	1961-10-17	Parker et al.	1.		
	\prod	2	3342258	1967-09-19	Prats			
	\prod	3	3455383	1969-07-15	Prats et al.			
	\prod	4	3501201	1970-03-17	Closmann et al.			
	\prod	5	3502372	1970-03-24	Prats			
		6	3759574	1973-09-18	Beard			
I		7	4160479	1979-07-10	Richardson et al.			
		8	4375302	1983-03-01	Kalmar			
		9	4483398	1984-11-20	Peters et al.			
		10	4815790	1989-03-28	Rosar et al.			

Examiner Name	Date
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Form PTO-1			ATTY. DKT. NO. 5659-03300	SERIAL NO. 09/841,310
List of Patent For Applicant	's Infor	mation nu 0 7 2004 🛠	APPLICANT: Wellington et al.	CONFIRMATION NO: 5964
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		TRADE		
	CC01	Porter, H. P., Petroleum Diction	ary for Oil, Field, and Factory, The Gulf Publ	ishing Company, 1948, 4th Ed., page 312.
	 			
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EXAMINER:

DATE CONSIDERED:

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Electronic Version v18
Stylesheet Version v18.0

Title of Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

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Scott Wellington

Attorney Docket Number: 5659-03300

Art Unit:

1764

Examiner:

T. D. Dang

Search string:

(3994340 or 3994341 or 4460044 or 4696345

or 2584605 or 2969226 or 3982591 or

3982592).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

	init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
Æ	W	1	3994340	1976-11-30	Anderson et al.			
		2	3994341	1976-11-30	Anderson et al.			
	\prod	3	4460044	1984-07-17	Porter			
		4	4696345	1987-09-29	Hsueh			
		5	2584605	1952-02-05	Merriam et al.			
		6	2969226	1961-01-24	Huntington			
		7	3982591	1976-09-28	Hamrick et al.			
		8	3982592	1976-09-28	Hamrick et al.			•

Signature

Examiner Name	Date		
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Page 1 of 1

ATTY. DKT. NO. 5659-03300 SERIAL NO. 09/841,310 Form PTO-1449 (modified) List of Patents and Publications CONFIRMATION NO.: 5964 APPLICANT: Wellington et al. For Applicant's Information Disclosure Statement FILING DATE: April 24, 2001 ART UNIT: 1764 (Use several sheets if necessary) U.S. PATENT DOCUMENTS DOCUMENT NUMBER DATE NAME CLASS SUB CLASS FILING DATE EXAM. REF. DES. INITIALS APPROPRIATE 2/8/1977 Redford et al. Ull 4006778

EXAM. INITIALS	REF. DES.	OTHER ART (including Author, Title, Date, Pertinent Pages, etc.)
MO	AA11	Van Krevelen, D. W.; COAL: Typology-Physics-Chemistry-Constitution, 1993, p. 371.

EXAMINER:

DATE CONSIDERED:

12/13/04

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Stylesheet Version v18.0

Title of Invention IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application Number:

09/841310

Confirmation Number:

5964

First Named Applicant:

Scott Wellington

Attorney Docket Number: 5659-03300

Art Unit:

1764

Examiner:

Glenn A. Caldarola

Search string:

(3947656).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
W	1	3947656	1976-03-30	Lodi			

Examiner Name	Date
Lewis Dohnson	12/13/04

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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
Stylesheet Version v18.0

Title of Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application Number:

09/841310

Confirmation Number:

5964

First Named Applicant:

Scott Wellington

Attorney Docket Number: 5659-03300

Art Unit:

1764

Examiner:

Glenn A. Caldarola

Search string:

(4931171 or 4737267 or 4384948 or 3593790

or 3497000 or 3244231 or 3223166).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

inik	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	4931171	1990-06-05	Piotter			
	2	4737267	1988-04-12	Pao et al.			
	3	4384948	1983-05-24	Barger			
	4	3593790	1971-07-20	Herce			
	5	3497000	1970-02-24	Hujsak et al.			
	6	3244231	1966-04-05	Grekel et al.			
	7	3223166	1965-12-14	Hunt et al.			

\sim	Examiner Name	Date
Derry ?	X Johnson	12/13/04

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)

ATTY. DKT. NO. 5659-03300

APPLICANT: Wellington et al.

FILING DATE: April 24, 2001

GROUP: 1764

SERIAL NO. 09/841,310

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EXAM. INITIALS	REF. DES	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
000	S 5	2,857,002	10/21/1958	Pevere et al.	-		
300	Ul	3,165,154	1/12/1965	Santourian			
- (-	U2	4,458,757	7/10/1984	Bock et al.			
			FOREIGN PATENT	DOCUMENTS	_ 		<u> </u>
EXAM. INITIÁLS	REF. DES	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
X(0)	T01	1836876	12/30/1994	SU			Y
420		OTHER ART	(Including Author, Ti	tle, Date, Pertinent I	ages, Etc.)		
		Burnham, Alan, K. "Oil S January 27, 1995, (23 pag	ges).				
		Burnham et al. "A Possib					
		Campbell, et al., "Kinetic	_				
	ŀ	Cummins et al. "Thermal U.S. Government Printin	g Office, 1972, (pages 1	-15).		_	
	 	Cook, et al. "The Compo Utilization of Oil Shale R	esources, Tallinn, 1968	, (pages 1-23).	· -		
		Hill et al., "The Characte Metallurgical & Petroleu	m Engineers, 1967 (pag	es 75-90)			
		Dinneen, et al. "Develops Development and Utiliza	tion of Oil Shale Resou	rces, Tallinn, 1968, (p	ages 1-20).		
		De Rouffignac, E. "In Sit pages).					
		Dougan, et al. "The Poter Colorado", Quarterly of t	he Colorado School of	Mines (pages 57-72).			
		Hill et al. "Direct Produc Development, 1967, Volu	me 6, (pages 52-59).	•			
	T12	Yen et al., "Oil Shale" De 187-198).	evelopments in Petroleu				
	T13	SSAB report, "A Brief D	escription of the Ljungs	trom Method for Shal	e Oil Produc	tion," 1950,	(12 pages).
	T14	Salomonsson G., SSAB r	eport, "The Lungstrom	In Situ-Method for Sh	ale Oil Reco	overy, 1950 (28 pages)
		"Swedish shale oil-Produ (70 pages).	ction method in Sweder	n," Organisation for E	uropean Eco	onomic Co-o	peration, 1952,
		SSAB report, "Kvarn To	rp" 1958, (36 pages).				
	T17	SSAB report, "Kvarn To	rp" 1951 (35 pages).				
	T18	SSAB report, "Summary	study of the shale oil w	orks at Narkes Kvarnt	orp" (15 pag	ges).	

EXAMINER! DATE CONSIDERED:

Petroleum Transactions, 1955 (pages 205-212).

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Vogel et al. "An Analog Computer for Studying Heat Transfrer during a Thermal Recovery Process," AIME

T19

Form PTO-1449 (modified)
List of Patents and Publications
For Applicant's Information
Disclosure Statement
(Use several sheets if necessary)



ATTY. DKT. NO. 5659-03300

SERIAL NO. 09/841,310

APPLICANT: Wellington et al.

GROUP: 1764

Disclosure	Statemen	f necessary) FILING DATE: April 24, 2001						
Use sever	T20	recessary) Fig. 1941. (3) FIG. 1941. (3) FIG. 1941. (3) FIG. 1941. (3)						
Ope		pages)						
1	T21	"Aggregleringens orsaker och ransoneringen grunder", Av director E.F.Cederlund I Statens livesmedelskonmmission (1page).						
	T22	Ronnby, E. "KVARNTORP-Sveriges Storsta skifferoljeindustri," 1943, (9 pages)						
	T23	SAAB report, "The Swedish Shale Oil Industry," 1948 (8 pages).						
1	T24	Gejrot et al., "The Shale Oil Industry in Sweden," Carlo Colombo Publishers-Rome, Proceedings of the Fourth World Petroleum Congress, 1955 (8 pages)						
	T25	Hedback, T. J., The Swedish Shale as Raw Material for Production of Power, Oil and Gas," XIth Sectional Meeting World Power Conference, 1957 (9 pages)						
•	T26	SAAB, "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand", 1955 Vol. 1, (141 pages) English						
	T27	SAAB, "Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Figures", 1955 Vol. 2, (146 pages) English.						
	T28	"Santa Cruz, California, Field Test of the Lins Method for the Recovery of Oil from Sand-Memorandum re: tests", 1955 Vol. 3, (256 pages) English.						
	T29	Helander, R.E., "Santa Cruz, California, Field Test of Carbon Steel Burner Casings for the Lins Method of Oil Recovery", 1959 (38 pages) English.						
	T30	Helander et al., Santa Cruz, California, Field Test of Fluidized Bed Burners for the Lins Method of Oil Recovery", 959, (86 pages) English.						
	T31	SSAB report, "Bradford Residual Oil, Athabasa Ft. McMurray" 1951, (207 pages), partial translation.						
	T32	"Lins Burner Test Results-English" 1959-1960						
	T33	SSAB "Annual Reports, SSAB Laboratory, Address Annually Issues-Shale and Ash, Oil, Gas, Waste Water, Analytical", 1953-1954, (166 pages). Swedish						
	T34	SSAB report, "Financial Matter, Swedish taxes, etc.," 1960-1961 (37 pages). Swedish						
	T35	SSAB report, "Cost For Mining," 1959-1979 (13 pages). Swedish						
	Т36	SSAB report, "Cost Comparison of Mining and Processing of Shale and Dolomite Using Various Production Alternatives", 1960, (64 pages). Swedish						
	T37	SSAB report, "Assessment of Future Mining Alternatives of Shale and Dolomite," 1962, (59 pages) Swedish.						
	T38	SSAB report. "Kartong 2 Shale: Ljungstromsanlaggningen" (104 pages) Swedish.						
	T39	SAAB, "Photos", (18 pages).						
	T40	SAAB report, "Swedish Geological Survey Report, Plan to Delineate Oil shale Resource in Narkes Area (near Kvarntorp)," 1941 (13 pages). Swedish.						
	T41	SAAB report, "Recovery Efficiency," 1941, (61 pages). Swedish.						
\top	T42	SAAB report, "Geologic Work Conducted to Assess Possibility of Expanding Shale Mining Area in Kvarntorp; Drilling Results, Seismic Results," 1942 (79 pages). Swedish.						
	T43	SSAB report, "Ojematinigar vid Norrtorp," 1945 (141 pages).						
	T44	SSAB report, "Inhopplingschema, Norrtorp II 20/3-17/8", 1945 (50 pages). Swedish.						
	T45	SSAB report, "Secondary Recovery after LINS," 1945 (78 pages)						
	T46	SSAB report, "Maps and Diagrams, Geology," 1947 (137 pages). Swedish.						
		· · · · · · · · · · · · · · · · · · ·						

EXAMINER:

DATE CONSIDERED:

12/13/04

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Form PTO-1449	(modified)	ATTY. DKT. NO. 5659-03300	SERIAL NO. 09/841,310				
List of Patents and	1 Dublications						
For Applicant's In		APPLICANT: Wellington et al.	GROUP: 1764				
Disclosure Statem	ient \		GROUP: 1764				
(Use several sheet	is if necessary)	FILING DATE: April 24, 2001					
T47			<u> </u>				
T48		rting Trials" 1951-1952, (134 pages). Swedis					
T49	SSAB report, "Analysis of Lujus Swedish.	nstrom Oil and its Use as Liquid Fuel," Thesis	s by E. Pals, 1949 (83 pages)				
3 T50	SSAB report, "Environmental S	ulphur and Effect on Vegetation," 1951 (50 page 1951)	ages). Swedish.				
T51	SSAB report, "Tar Sands", Vol.	135 1953 (20 pages, pages 12-15 translated).	Swedish.				
T52	SSAB report, "Assessment of SI	kanes Area (Southern Sweden) Shales as Fuel	Source," 1954 (54 pages). Swedish.				
T53	SSAB report, "From as Utre Dn	Text Geology Reserves," 1960 (93 pages). S	wedish.				
T54	SSAB report, "Kvarntorps-Envir	ronmental Area Asessment," 1981 (50 pages)	. Swedish.				
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1							

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DATE CONSIDERED: 12 13 04

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Electronic Version v18 Stylesheet Version v18.0

Title of Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application Number:

09/841310

Confirmation Number:

5964

First Named Applicant:

Scott Wellington

Attorney Docket Number: 5659-03300

Art Unit:

1764

Examiner:

Marian C. Knode

Search string:

(3285335 or 3456721).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

inix	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	3285335	1966-11-15	Reistle			
W	2	3456721	1969-07-22	Smith			

Examiner Name	Date
Janus Dohum	12/13/04



Electronic Version v18 Stylesheet Version v18.0

> Title of Invention

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

TO V18

T HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application Number:

09/841310

Confirmation Number:

5964

First Named Applicant:

Scott Wellington

Attorney Docket Number: 5659-03300

Art Unit:

1764

Examiner:

Marian C. Knode

Search string:

(3026940 or

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	3026940	1962-03-27	Spitz			
	2	3947683	1976-03-30	Schultz et al.			

Examiner Name	Date
Lewis Souris	12/13/04



Electronic Version v18 Stylesheet Version v18.0

Title of Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application Number:

09/841310

Confirmation Number:

First Named Applicant:

Scott Wellington

Attorney Docket Number: 5659-03300

Examiner:

Unknown Unknown

Search string:

(3986556 or 4031956 or 4140180 or 4412585 or 4501326 or 4524827 or 4585066

or 4776638 or 4856587 or 5517593 or 5099918 or 5751895 or 6015015 or

6112808).pn.

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US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
(20)	1	3986556	1976-10-19	Haynes			
	2	4031956	1977-06-28	Terry		•	
	3	4140180	1979-02-20	Bridges et al.			
	4	4412585	1983-11-01	Bouck			
	5	4501326	1985-02-26	Edmunds			•
	6	4524827	1985-06-25	Bridges et al.			
	7	4585066	1986-04-29	Moore et al.			
	8	4776638	1988-10-11	Hahn			
	9	4856587	1989-08-15	Nielson			
	10	5517593	1996-05-14	Nenniger et al.			
	.11	5099918	1992-03-31	Bridges et al.			
	12	5751895	1998-05-12	Bridges			`
	13	6015015	2000-01-18	Luft et al.			
	14	6112808	2000-09-05	Isted			

	Date		
Jerus Soluso 1	2/13/04		

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)



ATTY. DKT. NO. 5659-03300/TH1958

APPLICANT: Wellington, et al.

GROUP: 3672

SERIAL NO. 09/841,310

FILING DATE: April 24, 2001

U.S. PATENT DOCUMENTS

i			U.S. PATENT	DOCUMENTS			
EXAM.	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
TOWN	E1	3,181,613	May-1965	Krueger			
4		3,922,148	Nov-1975	Child			
3	易	3,924,680	Dec-1975	Тепту			
0	E4	5,020,596	Jun-1991	Hemsath		<u> </u>	
	È5	5,229,102	Jul-1993	Minet et al.			
-	E6	5,316,664	May-1994	Gregoli et al.			
	E7	5,366,012	Nov-1994	Lohbeck			
	E8	5,541,517	Jul-1996	Hartmann et al.			
	E9	5,861,137	Jan-1999	Edlund			
	E10	6,354,373	Mar-2001	Vercaemer et al.			
	E15	4,463,807	Aug-1984	Stoddard et al.		<u></u>	
		OTHER ART (I	ncluding Author,	Title, Date, Pertinent P	ages, Etc.)		
(200)		Coal, Encyclopedia of Chemic 1991, Vol. 6, pp. 423-488.	al Technology, Ki	rk, R.E., Kroschwitz, J.I.,	, Othmer, D.F	., Wiley, N	lew York, 4th edition
	E12	Cortez et al., UK Patent Applic	cation GB 2,068,0	14 A, Date of Publication	n: August 5, 1	981.	<u> </u>
	E13	Wellington et al., US Patent A	pplication 60/273,	354, Filed March 5, 2001	l.		
	E14	The VertiTrak System Brochus	re, Baker Hughes,	INT-01-1307A4, 2001 8	pages.		

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EXAMINER:

DATE CONSIDERED: 12/13/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.



Electronic Version v18 Stylesheet Version v18.0

Title of Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION HAVING A SELECTED TOTAL ORGANIC CARBON CONTENT

Application Number:

09/841310

Confirmation Number:

5964

First Named Applicant:

Kevin Maher

Attorney Docket Number: 5659-03300

Art Unit:

3673

Examiner:

John J. Kreck

Search string:

(3986556 or 4031956 or 4140180 or 4412585 or 4501326 or 4524827 or 4585066

or 4776638 or 4856587 or 5517593 or 5099918 or 5751895 or 6015015 or

6112808).pn.

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US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

izit	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
TM	1	3986556	1976-10-19	Haynes			
	2	4031956	1977-06-28	Terry			
	3	4140180	1979-02-20	Bridges et al.			
	4	4412585	1983-11-01	Bouck			
	5	4501326	1985-02-26	Edmunds			
団	6	4524827	1985-06-25	Bridges et al.			
	7	4585066	1986-04-29	Moore et al.			
匝	8	4776638	1988-10-11	Hahn			!
ഥ	9	4856587	1989-08-15	Nielson			
	10	5517593	1996-05-14	Nenniger et al.			. •
	11	5099918	1992-03-31	Bridges et al.	,		
	12	5751895	1998-05-12	Bridges			
	13	6015015	2000-01-18	Luft et al.			
	14	6112808	2000-09-05	Isted		•	

\sim	Examiner Name	Date		
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Form PTO-1449	(modifi		ATTY. D	KT. NO. 5659-0	3300 1958	SERIAL	NO. 09/841,310	
List of Patents an For Applicant's In Disclosure Staten (Use several shee	nformati nent	on (JUN 0 2 2003 \$	APPLICANT: Wellington et al. FILING DATE: April 24, 2001			GROUP: 3672		
FOREIGN PATENT DOCUMENTS								
EXAM.	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO	
WW .	AA2	294 809	1988-12-14	EP				

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JUN 0 3 2003
GROUP 3600

EXAMINER: (

DATE CONSIDERED:

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Page 1 of 1

Information Disclosure Statement--PTO 1449 (modified)



Electronic Version v18 Stylesheet Version v18.0

> Title of Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application Number:

09/841310

Confirmation Number:

5964

First Named Applicant:

Scott Wellington

Attorney Docket Number: 5659-03300

Examiner:

Unknown Unknown

Search string:

(1646599 or 3952802 or 4010800 or

3892270).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
init.	1	1646599	1927-10-25	Schaefer			
	2	3952802	1976-04-27	Terry			•
IT	3	4010800	1977-03-08	Terry			
	4	3892270	1975-07-01	Lindquist			

Remarks

Note: Remarks are not for responding to an office action.

Foreign applications and other art will be submitted on a PTO-1449 form

Signature

Examiner Name	Date
(Jun & Johnson	12/13/04

Pape of 1

GROUP TOO



Electronic Version v18 Stylesheet Version v18.0

> Title of Invention

IN SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application Number:

09/841310

Confirmation Number:

5964

First Named Applicant:

Scott Wellington

Attorney Docket Number: 5659-03300

Examiner:

Unknown Unknown

Search string:

(1646599 or 3952802 or 4010800 or

3892270).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
Q	1	1646599	1927-10-25	Schaefer			
	2	3952802	1976-04-27	Terry			•
	3	4010800	1977-03-08	Terry			
M	4	3892270	1975-07-01	Lindquist			

Remarks

Note: Remarks are not for responding to an office action.

Foreign applications and other art will be submitted on a PTO-1449 form

Signature

Examiner Name	Date
(leur) Johnson	12/13/04

CHOUD TOO

Electronic Information Disclosi **Statement**

IN SITU THERMAL PROCESSING (**HYDROCARBON CONTAINING** FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application:

Confirmation: 5964

Applicant(s):

Scott Wellington

Docket

5659-03300

Number:

Group Art Unit:

Examiner:

Unknown^{*}

search string:

(4193451 or 4265307 or 4390067 or 4456065 or 4457374 or 4479541 or 4498535 or 4598770

or 4669542 or 4682652 or 4982786 or 5201219 or 5339904 or 3349845).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Citation No.	Patent Number	Date	Bar Code	Patentee	Class	Subclass
	P08	4193451	1980-03- 18		Dauphine		
			1981-05-				

APP ID=09841310

Page 1 of 2

KM) PO	9	4265307	os	[Elkins
P1	10	4390067	1983-06- 28		Wilman
P1	1	4456065	1984-06- 26		Heim et al.
PI	12	4457374	1984-07- 03		Hoekstra et al.
Pì	13	4479541	1984-10- 30		Wang
Pì	14	4498535	1985-02- 12		Bridges
PI	15	4598770	1986-07- 08		Shu et al.
P1	16	4669542	1987-06- 02		Venkatesan
P1	17	4682652	1987-07- 28		Huang et al.
P1	18	4982786	1991-01- 08		Jennings, Jr.
P1	19	5201219	1993-04- 13		Bandurski et al.
P2	20	5339904	1994-08- 23		Jennings, Jr.
P2	25	3349845	1967-10- 31		Holbert et al.

Date
12/13/04



Electronic Information Disclost **Statement**

IN SITU THERMAL PROCESSING O HYDROCARBON CONTAINING FORMATION TO PRODUCE A **SELECTED RATIO OF COMPONENTS IN A GAS**

Application:

Confirmation:

5964

Applicant(s):

Scott Wellington

Docket

5659-03300

Number: **Group Art Unit:**

Examiner:

Unknown

search string:

(3221811 or 3987851 or 4042026 or 4005752 or 5868202 or 5126037 or 3477058 or

3580987).pn.

04/22/2003 HDAHTE1 00000006 501505

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US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

llinit	Citation No.	Patent Number	Date	Bar Code	Patentee	Class	Subclass
W.	P01	3221811	1965-12- 07	11111 TO	Prats		
	P02	3987851	1976-10- 26	I HINT OR HOUSE OF THE HOLD COLUMN HOLD	Tham		

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١.	<i>/</i> ·	•		u 1	ı .	1
Q	P03	4042026	1977-08- 16			
1	P04	4005752	1977-02 <i>-</i> 01	1010 COS 6100 CUST COS COST COST COST	Cha	APP CET
	P05	5868202	1999-02- 09	THE CONTROLLER OF THE CONTROL	Hsu	AR 25 MAS
	P06	5126037	1992-06- 30		Showalter	0
	P07	3477058	1968-11- 04	11118180 000 000 000 1104 1101 110	Vedder et al.	
	P08	3580987	1971-05- 25		Priaroggia	

Examiner Name	Date
Journ Johnson	12/13/04

Form PTO-1449 (modified)	ATTY. DKT. NO. 5659-03300/TH1958	SERIAL NO. 09/841,310
List of Patents and Publications		
For Applicant's Information	APPLICANT: Wellington et al.	GROUP: 3672
Disclosure Statement		
(Use several sheets if necessary)	FILING DATE: April 24, 2001	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

Van Krevelen, COAL: Typology-Physics-Chemistry-Constitution, 1993, pp. 27, 42, 52, 322, 323, 324, 325, 326, 526 527, 726.

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GROUP 3600

EXAMINER: Dun I Johnson

DATE CONSIDERED:

12/13/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through ation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Electronic Information Disclosure Statement

N SITU THERMAL PROCESSING OF A HYDROCARBON CONTAINING FORMATION TO PRODUCE A SELECTED RATIO OF COMPONENTS IN A GAS

Application:

09/841310

Confirmation: 5964

Applicant(s):

Scott Wellington

Docket

5659-03300

Number:

Group Art

Unit:

Examiner:

Unknown

search string:

(4087130 or 4537252 or re30019 or 2623596 or 3775185 or 4524113 or 5284878 or 5767584 or 5955039 or 4091869 or 4513816 or 0094813 or 5008085 or 4099567 or 0048994 or 6485232 or

20020018697).pn.

32/92/2003 EDENEESS 00000063 501505

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180,00 CH

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

llinit	Citation No.	Patent Number	Date	Bar Code	Patentee	Class Subclass
0	P23	4087130	1978-05- 02	HILES DES LESS HER DESCRIPTION CONTRACTOR	Garrett	
Ø	P24	4537252	1985-08- 27	1410 MITAIL 180 MITAU 180 MI	Puri	

	1		•			
Q)	P25	re30019	1979-06- 05	1000 TO 0 111 1680 160 1100 HD 1100 I	Lindquist	
	P26	2623596	1952-12- 30		Whorton et al.	
	P27	3775185	1973-11- 27		Kunz et al.	
	P28	4524113	1985-06- 18	THEO CONTRACTOR CONTRACTOR INCIDENCE	Lesieur	
	P29	5284878	1994-02- 05		Studer et al.	
	P30	5767584	1998-06- 16		Gore et. al	
	P31	5955039	1999-09 <i>-</i> 21		Dowdy	
	P32	4091869	1978-05- 30		Hoyer	
	P33	4513816	1985-04- 30		Hubert	
	P34	0094813	1869-09- 14		Dickey	
	P35	5008085	1991-04- 16		Bain et al.	
	P36	4099567	1978-07- 11	THE TOUCHD HIS HOLD THE TO HE	Terry	
	P37	0048994	1865-07- 25		Parry	
	P38	6485232	2002-11- 26	HTTO CON HOUNDING HOUSE	Vinegar et al.	

Published Applications

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

llinit	Citation No.	Patent Number	Date	Bar Code	Patentee	Class	Subclass
00	U01	20020018697	2002-02- 14		Vinegar et al.	,	

Form PTO-1449 (modified)
List of Patents and Publications
For Applicant's Information
Disclosure Statement

(Use several sheets if necessary

OCT 0 7 2002

ATTY. DKT. NO. 5659-03300/TH1958

SERIAL NO. 09/841,310

APPLICANT: Wellington et al.

GROUP: 3672

FILING DATE: April 24, 2001

U.S. PATENT DOCUMENTS

SS. H1 H3 H3 H3 H1 H1 H3 H3 H3 H1 H3	4,093,025 4,895,206 326,439 1,681,523 2,244,256 2,714,930 3,547,193	June 78 Jan-90 Sep-1885 Feb-1928 Jun-1941 Aug-1955 Dec-1970	NAME Terry Price McEachen Downey et. al. Looman Carpenter	CLASS		FILING DATE IF APPROPRIATE OUT 15
H1 H3 H3 H1 H3 H1	4,895,206 326,439 1,681,523 2,244,256 2,714,930 3,547,193	Jan-90 Sep-1885 Feb-1928 Jun-1941 Aug-1955	Price McEachen Downey et. al. Looman		1513	CST CC
11	326,439 1,681,523 2,244,256 2,714,930 3,547,193	Sep-1885 Feb-1928 Jun-1941 Aug-1955	McEachen Downey et. al. Looman		100	REC!
12 13 14 15 16	1,681,523 2,244,256 2,714,930 3,547,193	Feb-1928 Jun-1941 Aug-1955	Downey et. al. Looman		1,1	ST C
12 13 14 15 16	2,244,256 2,714,930 3,547,193	Jun-1941 Aug-1955	Looman		100	<u> </u>
13 14 15 16	2,714,930 3,547,193	Aug-1955			ç	1 4 0
J5 J6	3,547,193		Carpenter			<u> </u>
J5 J6		Dec 1070	•			5 1
J6		ן טיעני-טשע	Gill			三号马
	3,562,401	Feb-1971	Long			100 A
J7	4,089,374	May-1978	Тепу			*
J8	4,423,311	Dec-1983	Varney, Sr.			
J9		Dec-1984	Perkins			
10		Dec-1986	Fort, III			
11		Sep-1987	Stahl et. al.			
112	5,182,792	Jan-1993	Goncalves		DEC	
113	5,402,847	Apr-1995	Wilson et. al.			CIVED
114	5,491,969	Feb-1996	Cohn et. al.		OCT	0 9 2002
115	5,621,844	Apr-1997	Bridges		BOL	JP 3600
116	6,244,338	Jun-2001	Mones)! 3000
117	6,389,814	May-2002	Viteri et al.			
J18	6,412,559	Jul-2002	Gunter et al.			
J20	3,680,633	Aug-1972	Bennett			
J21	4,508,170	Apr-1985	Littman			
	F	OREIGN PATE	NT DOCUMENTS			
EF. I	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATIO YES/NO
J19	97/01017	Jan-1997	wo		<u>L</u>	<u></u>
	OTHER ART (I	ncluding Author,	Title, Date, Pertinent l	Pages, Etc.)		
J99 11 11 11 11 11 11 11 11 11 11 11 11 1	9 0 1 2 3 3 4 4 15 16 17 18 20 21	9 4,489,782 0 4,626,665 1 4,694,907 2 5,182,792 3 5,402,847 4 5,491,969 15 5,621,844 16 6,244,338 17 6,389,814 18 6,412,559 20 3,680,633 21 4,508,170 FIGS. DOCUMENT NUMBER 19 97/01017 OTHER ART (I	9 4,489,782 Dec-1984 0 4,626,665 Dec-1986 1 4,694,907 Sep-1987 2 5,182,792 Jan-1993 3 5,402,847 Apr-1995 4 5,491,969 Feb-1996 5 5,621,844 Apr-1997 16 6,244,338 Jun-2001 17 6,389,814 May-2002 18 6,412,559 Jul-2002 20 3,680,633 Aug-1972 21 4,508,170 Apr-1985 FOREIGN PATE 19 97/01017 Jan-1997 OTHER ART (Including Author,	9 4,489,782 Dec-1984 Perkins 0 4,626,665 Dec-1986 Fort, III 1 4,694,907 Sep-1987 Stahl et. al. 2 5,182,792 Jan-1993 Goncalves 3 5,402,847 Apr-1995 Wilson et. al. 4 5,491,969 Feb-1996 Cohn et. al. 5 5,621,844 Apr-1997 Bridges 6 6,244,338 Jun-2001 Mones 6 6,389,814 May-2002 Viteri et al. 6 6,412,559 Jul-2002 Gunter et al. 8 6,412,559 Jul-2002 Gunter et al. 9 3,680,633 Aug-1972 Bennett 9 4,508,170 Apr-1985 Littman FOREIGN PATENT DOCUMENTS EF. DOCUMENT NUMBER DATE COUNTRY 19 97/01017 Jan-1997 WO OTHER ART (Including Author, Title, Date, Pertinent I	9 4,489,782 Dec-1984 Perkins 1 4,626,665 Dec-1986 Fort, III 1 4,694,907 Sep-1987 Stahl et. al. 2 5,182,792 Jan-1993 Goncalves 3 5,402,847 Apr-1995 Wilson et. al. 4 5,491,969 Feb-1996 Cohn et. al. 15 5,621,844 Apr-1997 Bridges 16 6,244,338 Jun-2001 Mones 17 6,389,814 May-2002 Viteri et al. 18 6,412,559 Jul-2002 Gunter et al. 20 3,680,633 Aug-1972 Bennett 21 4,508,170 Apr-1985 Littman FOREIGN PATENT DOCUMENTS ES. DOCUMENT NUMBER DATE COUNTRY CLASS 19 97/01017 Jan-1997 WO OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)	A,489,782 Dec-1984 Perkins

EXAMINER:

DATE CONSIDERED: 12 13

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent own

Page 1 of 1 Information Disclosure Statement--PTO 1449 (modified)

Form PTO-1449 (modified)
List of Patents and Publications
For Applicant's Information
Disclosure Statement
(Use several sheets if necessary)

AUG 2 8 2002

ATTY. DKT. NO. 5659-03300/TH1958

SERIAL NO. 09/841,310

APPLICANT: Wellington et al.

GROUP: 3672

FILING DATE: April 24, 2001

U.S. PATENT DOCUMENTS

EXAM. INITIAAS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
ΔM	G5	3,766,982	Oct-73	Justheim			
1	G7	3,599,714	Aug-71	Messman et al.			
	G8	4,043,393	Aug-77	Fisher et al.			

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

VOI	G6	Rogers, Rudy E. "Coalbed Methane: Principles and Practice" Prentice-Hall, Inc. 1994, pp. 164-165.
	G9	Hyne, Norman J. Geology for Petroleum Exploration, Drilling, and Production. McGraw-Hill Book Company, 1984, p. 264.

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TC 1700

AUG 3 0 2002 GROUP 3600

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GROUP 3600

EXAMINER: Johnson

DATE CONSIDERED: 13 0

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Form PTO-1449 (modified List of Patents and Publication For Applicant's Information Disclosure Statement (Use several sheets if necessary)

ATTY. DKT. NO. 5659-03300/TH1958

SERIAL NO. 09/841,310

APPLICANT: Wellington et al.

GROUP: 3672

FILING DATE: April 24, 2001

U.S. PATENT DOCUMENTS

1				(<i>I</i> f	1000 041 Caparo 4114		
EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS		FILING DATE IF APPROPRIATE
(7)(1)	G5	3,766,982	Oct-1973	Justheim		_	

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GROUP 3500

EXAMINER: Dem Donuson

DATE CONSIDERED: 12/13/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Page 1 of __1_

Information Disclosure Statement-PTO 1449 (modified)

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)

ATTY. DKT. NO. 5659-03300/TH1958

SERIAL NO. 09/841,310

2002.

APPLICANT: Wellington et al.

GROUP: 3672

FILING DATE: April 24, 2001 **U.S. PATENT DOCUMENTS**

EXAM. REF. **DOCUMENT NUMBER** DATE NAME CLASS SUB FILING DATE IF INITIALS DES. APPROPRIATE CLASS G1 3,675,715 Jul-1972 Speller, Jr. G2 3,809,159 May-1974 Young et al.

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	G3	Rogers, Rudy E. "Coalbed Methane: Principles and Practice" Prentice-Hall, Inc. 1994, pp. 68-97.
1	G4	Department of Energy Coal Sample Bank and Database http://www.energy.psu.edu/arg/doesb.htm. June 4, 2

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Information Disclosure Statement-PTO 1449 (modified)

ATTY. DKT. NO. 5659-03300/TH1958 SERIAL NO. 09/841,310 Form PTO-1449 (modified) List of Patents and Publication **GROUP: 3672** JUL 0 2 200 APPLICANT: Wellington et al. For Applicant's Information Disclosure Statement FILING DATE: April 24, 2001 (Use several sheets if necessar **U.S. PATENT DOCUMENTS** E CEMABY SUB FILING DATE IF DOCUMENT NUMBER DATE EXAM. REF. **CLASS** APPROPRIATE DES. INITIA Pusch et al. 4,252,191 Feb-1981 Fl J. W. Marx et al. Mar-1967 F2 3,310,109 OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.) Thermal, Mechanical, and Physical Properties of Selected Bituminous Coals and Cokes, J. M. Singer and R. P. Tye, F3 US Department of Interior, Bureau of Mines (1979) Government Report No. 8364.

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Information Disclosure Statement--PTO 1449 (modified)

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement

(Use several sheets if necessary)

ATTY. DKT. NO. 5659-03300/TH1958

APPLICANT: Wellington, et al.

GROUP: 3672

SERIAL NO. 09/841,310

FILING DATE: April 24, 2001

	U.S.	PATENT	DOCUMENTS
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		BADEMAR	U.S. I A LEIVI	DOCUMENTO		,	· · · · · · · · · · · · · · · · · · ·
EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS		FILING DATE IF APPROPRIATE
	C1	1,269,747	6/1918	Rogers			
)	C2	1,457,479	6/1923	Wolcott		Pr	CEIVED
	C3	1,634,236	6/1927	Ranney		1 1	
	C4	2,630,307	3/1953	Martin			AY 0 6 2002
	C5	2,685,930	8/1954	Albaugh		⊢GR	OUP 3600
	C6	2,703,621	3/1955	Ford		<u> </u>	
	C7	2,771,954	11/1956	Jenks et al.			
	C8	2,793,696	5/1957	Morse		 	
	C9	2,890,754	6/1959	Hoffstrom et al.			
	C10	2,890,755	6/1959	Eurenius et al.			
	C11	2,906,340	9/1959	Herzog			
	C12	2,932,352	4/1960	Stegemeier			
	C13	2,958,519	11/1960	Hurley			
	C14	3,010,513	11/1961	Gerner			
	C15	3,010,516	11/1961	Schleicher			
	C16	3,036,632	5/1962	Koch et al.			
	C17	3,044,545	7/1962	Tooke			
	C18	3,061,009	10/1962	Shirley		1 /	
	C19	3,062,282	11/1962	Schleicher			<u> </u>
	C20	3,084,919	4/1963	Slater			ļ
	C21	3,113,619	12/1963	Reichle		 	
	C22	3,116,792	1/1964	Purre	_ _		
	C23	3,120,264	2/1964	Barron			
	C24	3,127,935	4/1964	Poettmann et al		 	
	C25	3,127,936	4/1964	Eurenius		<u> </u>	
	C26	3,132,692	5/1964	Marx et al.		 	<u> </u>
	C27	3,205,944	9/1965	Walton		$\bot \downarrow -$	ļ
	C28	3,233,668	2/1966	Hamilton et al.			
	C29	3,273,640	9/1966	Huntington			
	/esq/	3.275,076	9/1966	Sharp			<u> </u>

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ATTY. DKT. NO. 5659-03300/TH1958

APPLICANT: Wellington, et al.

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		W. D.	PATENT	DOCUMENTS			
EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	C31	3,294,167	12/1966	Vogel			
1	C32	3,352,355	11/1967	Putman	\		CEIVED
i	C33	3,379,248	4/1968	Strange			V 0 C 2002
	C34	3,605,890	9/1971	Holm			Y 0 6 2002
	C35	3,617,471	11/1971	Schlinger et al.		GRO	DUP 3600
	C36	3,661,423	5/1972	Garrett	_		
	C37	3,770,398	11/1973	Abraham et al.		 	
	C38	3,882,941	5/1975	Pelofsky			
	C39	3,948,319	4/1976	Pritchett			
	C40	3,954,140	5/1976	Hendrick			
	C41	3,986,349	10/1976	Egan	$\bot \bot$		
	C42	3,999,607	12/1976	Pennington et al.		<u> </u>	
	C43	4,008,762	2/1977	Fisher et al.		<u> </u>	
	C44	4,019,575	4/1977	Pisio et al.		<u> </u>	
	C45	4,026,357	5/1977	Redford		-	
	C46	4,049,053	9/1977	Fisher et al.		11	
	C47	4,057,293	11/1977	Garrett		11	
	C48	4,067,390	1/1978	Camacho et al.	_	11	-
	C49	4,069,868	1/1978	Теггу	_	↓ 	
	C50	4,084,637	4/1978	Todd		╁┧	
	C51	4,114,688	9/1978	Теггу		11-	
	C52	4,144,935	3/1979	Bridges et al.		11	
	C53	4,183,405	1/1980	Magnie		-	
	C54	4,228,854	10/1980	Sacuta			
	C55	4,243,101	1/1981	Grupping		 	
	C56	4,277,416	7/1981	Grant		 	
	C57	4,306,621	12/1981	Boyd et al.		 	
	C58	4,324,292	4/1982	Jacobs et al.		1	ļ
	C59	4,344,483	8/1982	Fisher et al.		⊥`_	<u></u>

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	 		S. PATENT		CLASS	SUB	FILING DATE IF
EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	CLASS	APPROPRIATE
MU	C60	4,353,418	10/1982	Hoekstra et al.	1		
1	C61	4,384,613	5/1983	Owen et al.	1		
	C62	4,396,062	8/1983	Iskander	1 1		EIVED!
	C63	4,397,732	8/1983	Hoover et al.			
	C64	4,444,255	4/1984	Geoffrey et al.		MAY	6 2002
	C65	4,448,251	5/1984	Stine		Fill	P 3600
	C66	4,448,252	5/1984	Stoddard et al.			
$\neg \vdash$	C67	4,457,365	7/1984	Kasevich et al.			
	C68	4,476,927	10/1984	Riggs			
	C69	4,485,869	12/1984	Sresty et al.			
	C70	4,524,826	6/1985	Savage			
	C71	4,549,396	10/1985	Garwood et al.			
	C72	4,573,530	3/1986	Audeh et al.			
	C73	4,576,231	3/1986	Dowling et al.			
	C74	4,592,423	6/1986	Savage et al.			
	C75	4,608,818	9/1986	Goebel et al.			
	C76	4,637,464	1/1987	Forgac et al.			
	C77	4,651,825	3/1987	Wilson			
	C78	4,662,438	5/1987	Taflove et al.			
	C79	4,662,439	5/1987	Puri			
	C80	4,662,443	5/1987	Puri et al.			
	C81	4,691,771	9/1987	Ware et al.			
	C82	4,704,514	11/1987	Van Edmond et al.			
	C83	4,772,634	9/1988	Farooque			
	C84	4,787,452	11/1988	Jennings, Jr.			
	C85	4,817,711	4/1989	Jeambey			
	C86	4,818,370	4/1989	Gregoli et al.			
	C87	4,928,765	5/1990	Nielson			
	C88	5,064,006	11/1991	Waters et al.			
	C89		1/1992	Kiamanesh	1		

DATE CONSIDERED: **EXAMINER:**

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FILING DATE: April 24, 2001

NAPPLICANT: Wellington, et al.

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		TRADE	PATE I	DOCUMENTS				
EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUE CLAS		NG DATE IF ROPRIATE
CNO	C90	5,082,055	1/1992	Hemsath		11		
1	C91	5,217,076	6/1993	Masek				
	C92	5,261,490	11/1993	Ebinuma		F	REC	EWED
	C93	5,285,846	2/1994	Mohn			-MAY	0 6 2002
	C94	5,289,882	3/1994	Moore		$\downarrow \downarrow$		
	C95	5,411,104	5/1995	Stanley		Ψ	HU	JP 3600
	C96	5,632,336	5/1997	Notz et al.				
	C97	5,713,415	2/1998	Bridges				
	C98	6,328,104	12/2001	Graue				
	D1	3,149,670	9/1964	Grant				
	D2	3,380,913	4/1968	Henderson				
	D3	3,794,116	2/1974	Higgins				
	D4	4,197,911	4/1980	Anada				
	D5	4,412,124	10/1983	Kobayashi				
	D8	3,316,962	5/1967	Lange				
		F	OREIGN PATE	NT DOCUMENTS			1	
EXAM. INITIAKS	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CI	ASS	SUB CLASS	TRANSLATI ON YES/NO
OU	C99	2,015,460	10/1991	CA				
1	C100	940558 A1	9/1999	EP				
	C101	01/81723 A1	11/2001	WO				
	C102	01/81505 A1	11/2001	wo				
	D6	1,165,361	4/1984	CA				<u> </u>
	D7	1,168,283	5/1994	CA				<u> </u>
		OTHER ART (I	ncluding Author	, Title, Date, Pertinent P	ages, Etc.)			
900	C103	Appalachian Coals: Potential I Enhancing CBM Production; (C.W. Byer, et al.,	Proceedings of the Interna	itional Coal	bed Met	hane Sym	iposium.
)	C104	The Pros and Cons of Carbon Sequestration Technologies; CPA.	. Hanisch, Enviro	nmental Science and Tech	nnology, Ar	nerican (nemical	Society, Easton
		Pilot Test Demonstrates How McGovern, Petroleum Techno	Carbon Dioxide E logy Digest, Sept	inhances Coal Bed Methanember 2000, p. 14-15.	ne Recover	y, Lanny	Schoelin	g and Michael

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ATTY. DKT. NO. 5659-03300/TH1958

APPLICANT: Wellington, et al.

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FILING DATE: April 24, 2001

OTHER Man (including Author, Title, Date, Pertinent Pages, Etc.)

700		In Situ Measurement of Some Thermoporoelastic Parameters of a Granite, Berchenko et al., Poromechanics, A Tribute to Maurice Biot, 1998, p. 545-550.
		Conversion characteristics of selected Canadian coals based on hydrogenation and pyrolysis experiments, W. Kalkreuth, C. Roy, and M. Steller. Geological Survey of Canada, Paper 89-8, 1989, pages 108-114, XP001014535
	1 110	Passey et al., US Patent Application Publication 2001/0049342 A1, December 6, 2001.
	D10	Tar and Pitch, G. Collin and H. Hoeke. Ullmann's Encyclopedia of Industrial Chemistry, Vol. A 26, 1995, p. 91-127.

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FILING DATE: April 24, 2001 U.S. PATENT DOCUMENTS

EXAM.	REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
NITIALS	DES.		05/1904	Butler	+	(
<u> </u>		760,304	06/1920	Day	+-+-	-	
	A2	1,342,741	10/1924	Clark	+-+		
	A3	1,510,655		Crawshaw			
	A4	1,666,488	02/1927				
	A5	1,913,395	11/1929	Karrick	\bot		
	A6	2,423,674	07/1947	Agren	<u> </u>		
	A7	2,444,755	07/1948	Steffen		 	
	A8	2,466,945	02/1946	Greene			
	A9	2,472,445	06/1949	Sprong			
	A10	2,484,063	10/1949	Ackley		EAV	DECENTED
	A11	2,497,868	02/1950	Dalin		FAA	RECEIVED
	A12	2,548,360	04/1951	Germain			AN 0 7 2002
	A13	2,593,477	04/1952	Newman et al.		1 _ 1	
	A14	2,595,979	05/1952	Pevere et al.		GH	QUP 3600
	A15	2,630,306	01/1952	Evans			
	A16	2,634,961	04/1953	Ljungstrom			
	A17	2,642,943	06/1953	Smith et al.			
	A18	2,670,802	03/1954	Ackley			· ·
	A19	2,695,163	11/1954	Pearce et al.			:
	A20	2,732,195	01-24-56	Ljungstrom			
	A21	2,734,579	02-14-56	Elkins			
	A22	2,780,449	02-05-57	Fisher et al.			
	A23	2,777,679	01/1957	Ljungstrom			
	A24	2,780,450	02/1957	Ljungstrom			
	A25	2,786,660	03/1957	Alleman			
	A26	2,789,805	04/1957	Ljungstrom			
	A27	2,804,149	08/1957	Kile			
	A28	2,841,375	07/1958	Salomonsson			
	A29	2,902,270	09/1959	Salomonsson et al.			
	A30	2,902,270	09/1939	Henning		1 1	

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ATTY. DKT. NO. 5659-03300/TH

APPLICANT: Wellington, et al.

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EXAM. NITIALS	REF. DES.	DOCUMENT NUMBER	DATE	IAMINE	- CENIOS		APPROPRIATE
M	A31	2,914,309	11/1959	Salomonsson			
1	A32	2,923,535	02/1960	Ljungstrom			
	A33	2,939,689	06/1960	Ljungstrom			· ·
	A34	2,954,826	10/1960	Sievers			
	A35	2,974,937	03/1961	Kiel			
	A36	2,994,376	08/1961	Crawford et al.			
	A37	2,998,457	08/1961	Paulsen		1_1_	
	A38	3,004,603	10/1961	Rogers et al.			
	A39	3,007,521	11/1961	Trantham et al.			<u> </u>
	A40	3,095,031	06/1963	Eurenius et al.		FA	X RECEIVE JAN 0 7 2002
	A41	3,105,545	10/1963	Prats et al.			TORIVE
	A42	3,106,244	10/1963	Parker			JAN 0 7 2002
	A43	3,110,345	11/1963	Reed et al.		<u></u>	POUD See
	A44	3,113,623	12/1963	Krueger		Ψ'	ROUP 3600
	A45	3,114,417	12/1963	McCarthy		 	
	A46	3,131,763	05/1964	Kunetka et al.			
	A47	3,139,928	07/1964	Broussard		1	
	A48	3,142,336	07/1964	Doscher			
	A49	3,149,672	10/1964	Orkiszewski et al.			
	A50	3,163,745	12/1964	Boston		-	
	A51	3,164,207	01/1965	Thessen et al.		↓↓ -	
	A52	3,182,721	05/1965	Hardy		1	
	A53	3,183,675	05/1965	Schroeder	\bot		
	A54	3,191,679	06/1965	Miller		1	
	A55	3,205,946	10/1965	Prats et al.	+	 	
	A56	3,207,220	10/1965	Williams		 	
	A57	3,208,531	10/1965	Tamplen		 	
	A58	3,209,825	10/1965	Alexander et al.	$\bot \bot$	1 1	<u> </u>
		/				1_1	<u></u>

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APPLICANT: Wellington, et al.

FILING DATE: April 24, 2001

SERIAL NO. 09/841,310

GROUP: 3672

U.S. PATENT DOCUMENTS

EXAM.	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
INITIALS (/)()	A59	3,237,689	03/1966	Justheim	1_1_		
Alb.	A60	3,241,611	03/1966	Dougan			
	A61	3,250,327	05/1966	Crider			
	A62	3,267,680	08/1966	Schlumberger			
	A63	3,284,281	11/1966	Thomas			
	A64	3,338,306	08/1967	Cook			
	A65	3,528,501	09/1970	Parker			
	A66	3,595,082	07/1971	Miller et al.			
	A67	3,973,628	08/1976	Colgate			
	A68	3,992,148	11/1975	Child			
	A69	3,993,132	11/1977	Garrett		FAX F	ECEIVED
	A70	4,016,239	04/1977	Fenton		<u> </u>	7 2002
	A71	4,076,761	02/1978	Chang et al.		JAI	0 7 2002
	A72	4,089,372	05/1978	Теггу		LGRC	UP 3600
	A73	4,093,026	06/1978	Ridley			
	A74	4,096,163	06/1978	Chang, et al.			
	A75	4,130,575	12/1978	Jorn et al.			
	A76	4,133,825	01/1979	Stroud et al.			
	A77	4,138,442	02/1979	Chang et al.			
	A78	4,186,801	02/1980	Madgavkar et al.			
	A79	4,250,230	02/1981	Теггу			
	A80	4,250,962	02/1981	Madgavkar et al.			
	A81	4,273,188	06/1981	Vogel et al.			
	A82	4,274,487	06/1981	Hollingsworth et al.			
	A83	4,299,086	11/1981	Madgavkar et al.			
	A84	4,299,285	11/1981	Tsai et al.	$\bot \!\!\! \bot$		·
	A85		11/1982	Vinegar et al.			
	A86		12/1982	Madgavkar et al.			
1.	A87	4,366,668	01/1983	Madgavkar et al.			
	A88	4,378,048	03/1983	Madgavkar et al.	\ \		

EXAMINER: DATE CONSIDERED: 12/13/04

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ATTY. DKT. NO. 5659-03300/TH

APPLICANT: Wellington, et al.

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SERIAL NO. 09/841,310

FILING DATE: April 24, 2001 U.S. PATENT DOCUMENTS

SUB FILING DATE IF CLASS NAME REF. DOCUMENT NUMBER DATE EXAM. **CLASS** APPROPRIATE DES. INITIALŞ A89 Madgavkar et al. 05/1983 4,381,641 A90 Vinegar et al. 08/1983 4,398,151 A91 van Dijk et al. 10/1983 4,407,973 A92 Hanson et al. 10/1983 4,409,090 A93 04/1984 Kalmar 4,444,258 A94 Gregoli 02/1985 4,501,445 A95 Hartman et al. 07/1985 4,530,401 A96 10/1985 Vinegar et al. 4,540,882 A97 Vinegar et al. 10/1985 4,542,648 A98 Van Meurs et al. 02/1986 4,570,715 A99 Vinegar et al. 02/1986 4,571,491 A100 Vanegmond et al. 02/1986 FAX RECEIVED 4,572,299 A101 04/1986 Vinegar et al. 4,583,046 JAN 0 7 2002 A102 Vinegar et al. 04/1986 4,583,242 A103 Minderhoud 06/1986 4,594,468 GROUP 3600 A104 Ware et al. 07/1986 4,597,441 A105 Beuther et al. 08/1986 4,605,680 A106 Vinegar et al. 09/1986 4,613,754 A107 Stegemeier et al. 4,616,705 10/1986 A108 Vinegar et al. 01/1987 4,635,197 A109 Vanmeurs et al. 02/1987 4,640,352 A110 Vinegar et al. 02/1987 4,644,283 A111 Vinegar et al. 4,658,215 04/1987 A112 Vinegar et al. 05/1987 4,663,711 A113 Vinegar et al. 06/1987 4,671,102 A114 Eastlund et al. 01/1988 4,716,960 A115 Vinegar et al. 01/1988 4,719,423 A116 Vinegar et al. 03/1988 4,728,892 A117 Vinegar et al. 03/1988 4,730,162 A118 Vinegar et al. 05/1988 4,743,864

DATE CONSIDERED: 12/13/04 EXAMINER[®]

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ATTY. DKT. NO. 5659-03300/TH

APPLICANT: Wellington, et al.

GROUP: 3672

SERIAL NO. 09/841,310

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U.S. PATENT DOCUMENTS

XAM.	REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
ITIALS	DES.	1.00.100	09/1000	Shakkottai et al.	1	1	
1m	A120	4,762,425	08/1988		+	-	
		4,769,602	09/1988	Vinegar et al.		 	
	A121	4,769,606	09/1988	Vinegar et al.	- - -		
	A122	4,793,656	12/1988	Siddoway et al.			
· <u> </u>	A123	4,827,761	05/1989	Vinegar et al.			
	A124	4,848,924	07/1989	Nuspl et al.			
	A125	4,856,341	08/1989	Vinegar et al.		 	·
	A126	4,860,544	08/1989	Krieg et al.		 	<u> </u>
	A127	4,866,983	09/1989	Vinegar et al.	\bot		
	A128	4,884,455	12/1989	Vinegar et al.		V pd(EIVED
	A129	4,886,118	12/1989	Van Meurs et al.	17/	114	
	A130	4,927,857	05/1990	McShea III et al.		JAN 0	2002
	A131	4,974,425	12/1990	Krieg et al.			+ 3600
\top	A132	4,983,319	01/1991	Gregoli et al.		BROU	3000
+	A133	4,984,594	01/1991	Vinegar et al.			
+-	A134	4,987,368	01/1991	Vinegar			
	A135	4,994,093	02/1991	Wetzel et al.			
	A136	5,014,788	05/1991	Puri et al.			
_	A137	5,046,559	10/1991	Glandt			
+	A138	5,050,386	09/1991	Krieg et al.			
+	A139	5,060,287	10/1991	Van Egmond			
+	A140	5,060,726	10/1991	Glandt et al.			
	A141		11/1991	Van Egmond			
+	A142	5,065,818	12/1992	Stegemeier et al.			
+	A143	3,100,927	02/1993	Carl, Jr. et al.			
+-	A144	3,189,283		Vinegar et al.	11		
-+-	A145	5,190,405	03/1993				
_	A146	5,207,273	05/1993	Cates et al.		1 1	
	A140	3,211,230	05/1993	Ostapovich et al.		+	
	i	3,220,961	07/1993	Nahm et al.		+	-
ł	A148	5,229,583	07/1993	van Egmond et al.		<u> </u>	

DATE CONSIDERED: 12/13/04 EXAMINER:

ATTY. DKT. NO. 5659-03300/TH

APPLICANT: Wellington, et al.

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EXAM.	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
NITIALS (///))	A149	5,236,039	08/1993	Edelstein et al.		1	
1	A150	5,255,742	10/1993	Mikus			
	A151	5,297,626	03/1994	Vinegar et al.			
	A152	5,306,640	04/1994	Vinegar et al.			
	A153	5,318,116	06/1194	Vinegar et al.			
	A154	, 5,339,897	08/1994	Leaute			
	A155	5,340,467	08/1994	Gregoli et al.			
	A156	5,349,859	09/1994	Kleppe			
	A157	5,388,640	02/1995	Puri et al.			
	A158	5,388,641	02/1995	Yee et al.			
	A159	5,388,642	02/1995	Puri et al.			
	A160	5,388,643	02/1995	Yee et al.		EAV	,
	A161	5,388,645	02/1995	Puri et al.		174	RECEIVED
	A162	5,391,291	02/1995	Winquist et al.		JA	N 0 7
	A163	5,392,854	02/1995	Vinegar et al.			7002
	A164	5,404,952	04/1995	Vinegar et al.		GH(UP 3600
	A165	5,409,071	04/1995	Wellington et al.			0000
	A166	5,411,089	05/1995	Vinegar et al.			
	A167	5,415,231	05/1995	Northrop et al.			
	A168		07/1995	Laali			
	A169		07/1995	Vinegar et al.			
	A170		08/1995	Gray			
	A171	5,439,054	08/1995	Chaback et al.			
	A172		10/1995	Chaback et al.			
	A173		03/1996	Vinegar et al.			
	A174		03/1996	Vinegar et al.			
-	A175		06/1996	Willms			
	A176		09/1996	Stegemeier et al.			
-	A177		09/1996	Steinfeld et al.	17		
 	A178		10/1996	Chaback et al.			

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ATTY. DKT. NO. 5659-03300/TH

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GROUP: 3672

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FILING DATE: April 24, 2001

U.S. PAIENI DOCUMENTS							
EXAM.	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS		FILING DATE IF APPROPRIATE
(VVIII)	A179	5,624,188	04/1997	West		1	
1	A180	5,656,239	08/1997	Stegemeier et al.			
	A181	5.656.010	10/1007	Vuolena	1 1		Ì

TANK THE FIRST							l l
MAD	A179	5,624,188	04/1997	West		1	
	A180	5,656,239	08/1997	Stegemeier et al.		<u> </u>	
	A181	5,676,212	10/1997	Kuckes			
	A182	5,862,858	01/1999	Wellington et al.			
	A183	5,899,269	05/1999	Wellington et al.			
	A184	5,968,349	10/1999	Duyvesteyn et al.			
	A185	5,984,010	11/1999	Elias et al.		1	
	A186	5,985,138	11/1999	Humphreys			
	A187	5,997,214	12/1999	de Rouffignac et al.			
	A188	6,016,867	01/2000	Gregoli et al.			
	A189	6,016,868	01/2000	Gregoli et al.		FA	X RECEIVE AN 0 7 2002 OUP 3600
	A190	6,019,172	02/2000	Wellington et al.			TECEIVE
	A191	6,023,554	02/2000	Vinegar et al.		1	VAN 0 7 20
	A192	6,056,057	05/2000	Vinegar et al.		Co	2002
	A193	6,079,499	06/2000	Mikus et al.		THIT!	OUP 3600
	A194	6,085,512	07/2000	Agee et al.			
	A195	6,094,048	07/2000	Vinegar et al.			
	A196	6,102,122	08/2000	de Rouffignac			
	A197	6,102,622	08/2000	Vinegar et al.			
	A198	6,152,987	11/2000	Ma et al.			
	A199	6,172,124	01/2001	Wolflick et al.			
	A200	6,173,775 B1	01/2001	Elias et al.		1	
 	A201	6,187,465	02/2001	Galloway			
	A202	Re. 30,738	09/1981	Bridges et al.			
	A203	Re. 35,696	12/1997	Mikus	1	1-	
 			FOREIGN PATE	NT DOCUMENTS	<u> </u>		<u></u>

EXAM. INITIANS	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLAT ON YES/NO
DUK	A204	121,737	03/1948	Sweden			
W W	A205	123,136	11/1948	Sweden			

EXAMINER

DATE CONSIDERED: 12 13

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent own

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MADEN!" FOREIGN PATENT DOCUMENTS

XAM.	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLAT
IITIALS NATA	A206	123,137	11/1948	Sweden		CLASS	ON TESTIN
	A207	123,138	11/1948	Sweden		 	
	A208	126,674	11/1949	Sweden			
			11/1985	CA		 	
	A209	1,196,594					
	A210	1,253,555	05/1989	CA		<u> </u>	
	A211	1,288,043	08/1991	CA		ļļ	ļ
	A212	156,396	01/1921	GB			<u> </u>
	A213	674,082	06/1952	GB			<u> </u>
T	A214	697,189	09/1953	GB			
T	A215	1,454,324	11/1976	GB			
	A216	1,501,310	02/1978	GB			
	A217	2,086,416	05/1982	GB			
	A218	1836876	12/1994	SU			
\top	A219	0570228 B1	09/1996	EP			
	A220	99/01640	01/1999	wo	-	K REC	TIVED
	A221	95/06093	03/1995	wo	FA	, ,	,
†	A222	95/12746	05/1995	WO		JAN 0 7	2002
1	A223	95/33122	12/1995	wo		ROUF	3600
1 -	A224	95/12742	05/1995	wo		βHΨU	3000
-	A225	95/12743	05/1995	WO			
+-	A226	95/12744	05/1995	WO			1
-	A227	95/12745	05/1995	WO	-11		1
	J	OTHER ART (I	ncluding Author,	Title, Date, Pertinent Page	s, Etc.)	<u> </u>	<u> </u>
M	}	Some Effects of Pressure on Oppp. 287-292.					·
1	A229	New in situ shale-oil recovery	process uses hot n	atural gas; The Oil & Gas Jou	ırnal; May 16	i, 1966, p. 15	11.
1	A230	Evaluation of Downhole Electronic Society 37th Annual Petroleum	and Chemical Ind	ustry Conference; The Institu	ntrol in Oil W	ells; Industral and Electr	y Application onics Engine

EXAMINER: JOHNSON

Inc., Bosch et al., September 1990, pp. 223-227.

Campbell et al. In Sitte 2(1), 1978, pp. 1-47.

DATE CONSIDERED:

12/13/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent own

A231 New System Stops Paraffin Build-up; Petroleum Engineer, Eastlund et al., January 1989, (3 pages).

A232 Oil Shale Retorting: Effects of Particle Size and Heating Rate on Oil Evolution and Intraparticle Oil Degradation;



ATTY. DKT. NO. 5659-03300/TH

APPLICANT: Wellington, et al.

GROUP: 3672

SERIAL NO. 09/841,310

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(Use several	sheets 11	OTHERART (Including Author, Title, Date, Pertinent Pages, Etc.)
<u> </u>		The Potential For In Situ Retorting of Oil Shale In the Piceance Creek Basin of Northwestern Colorado; Dougan et al
		la C. I C. L
(pr	14.224	Retoring Oil Shale Underground-Problems & Possibilities; B.F. Grant, Qtly of Colorado School of Mines, pp 39-46.
1	A234	Retoring On Shale Underground Proteins & 133 1
	A235	Molecular Mechanism of Oil Shale Pyrolysis in Nitrogen and Hydrogen Atmospheres, Hershkowitz et al.;
		Geochemistry and Chemistry of Oil Shales, American Chemical Society, 5/1983 pp. 301-316.
	A236	The Characteristics of a Low Temperature in Situ Shale Oil; George Richard Hill & Paul Dougan, Quarterly of the
		Colorado School of Mines, 1967; pp. 75-90.
	A237	Direct Production Of A Low Pour Point High Gravity Shale Oil; Hill et al., I & EC Product Research and
	1.222	Development, 6(1), March 1967; pp. 52-59.
	A238	Refining Of Swedish Shale Oil, L. Lundquist, pp. 621-627.
	A239	The Benefits of In Situ Upgrading Reactions to the Integrated Operations of the Orinoco Heavy-Oil Fields and
j		In the contract of Marcon Marcon Marcon Marcon Marcon Society of Petroleum Engineers, June 2000, pp. 1-14.
	A240	Monitoring Oil Shale Retorts by Off-Gas Alkene/Alkane Ratios, John H. Raley, Fuel, Vol. 39, June 1360, pp. 413-42
	A241	The Shale Oil Question, Old and New Viewpoints, A Lecture in the Engineering Science Academy, Dr. Fredrik
		by
├─┼─	A242	Underground Shale Oil Pyrolysis According to the Ljungstroem Method; Svenska Skifferolje Aktiebolaget (Swedish
		les (69 6) TVA V-1 94 1052 No 2 nn 11X-175
	A243	Kinetics of Low-Temperature Pyrolysis of Oil Shale by the HTRI RF Process, Sresty et al.; 13 Oil Single Symposium
1	1	IC-1
	A244	Bureau of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines Oil-Shale Research, H.M. Thorne, M.M. Thorne, M.M. Thorne, M.M. Thorne, M.M. Tho
	A245	Application of a Microretort to Problems in Shale Pyrolysis, A. W. Weitkamp & L.C. Grisener, Ind. Englichem.
		Process Des. Develop. Vol. 9, No. 3, 1970, pp. 386-395.
	A246	Bureau of Mines Oil-Shale Research, H.M. Thorne, Quarterly of the Colorado School of Mines, pp. 17-90. Application of a Microretort to Problems in Shale Pyrolysis, A. W. Weitkamp & L.C. Guitadet, Ind. Eng. Chem. Process Des. Develop. Vol. 9, No. 3, 1970, pp. 386-395. Oil Shale, Yen et al., Developments in Petroleum Science 5, 1976, pp. 187-189, 197-198. The Composition of Green River Shale Oils, Glenn L. Cook, et al., United Nations Symposium on the Development and Utilization of Oil Shale Resources, 1968, pp. 1-23. High-Pressure Pyrolysis of Green River Oil Shale, Burnham et al., Geochemistry and Chemistry of Oil Shales, American Chemical Society, 1983, pp. 335-351.
	A247	The Composition of Green River Shale Oils, Glenn L. Cook, et al., United Nations Symposium on the Odvelopment
	1	and Utilization of Oil Shale Resources, 1968, pp. 1-23.
	A248	High-Pressure Pyrolysis of Green River Oil Shale, Burnham et al., Geochemistry and Chemistry of Oil Shales,
		American Chemical Society, 1983, pp. 335-351.
 	A249	Chemic American Chemic
]		Cociety 1092 nn 1-11
	Δ250	A Possible Mechanism of Alkene/Alkane Production, Burnham et al., Oil Shale, Tar Sands, and Related Materials,
1		la marian Chamical Society 1981 np. 79-97
	A251	True Time Annual City Mathod of Shale Oil Recovery G. Salomonsson, Oil Shale and Cannel Coal, Vol. 2,
l i	1	Proceedings of the Second Oil Shale and Cannel Coal Conference, Institute of Federality 1991; Bondon, pp. 200 200
	A252	The second of the first the second of the se
	1	Development and Utilization of Oil Shale Resources, Laramie Petroleum Research Center, Bureau of Williams, 1966,
		L 1 20
	A253	The Thermal and Structural Properties of a Hanna Basin Coal, R.E. Glass, Transactions of the ASME, Vol. 106, June
		1984, pp. 266-271. The Thermal and Structural Properties of the Coal in the Big Coal Seam, R.E. Glass, In Situ, 8(2), 1984, pp. 193-205.
	A254	The Thermal and Structural Properties of the Coal in the Big Coal Scaling Res. Glass, 20 5 17 17 17 17 17 17 17 17 17 17 17 17 17
	A255	Investigation of the Temperature Variation of the Thermal Conductivity and Thermal Diffusivity of Coal, Badzioch et
	l l	11 First 3/a1 42 No. 4 July 1064 np. 267-280
	A256	On the Mechanism of Kerogen Pyrolysis, Alan K. Burnham & James A. Happe, January 10, 1984 (17 pages).
	Bl	Proposed Field Test of the Lins Method Thermal Oil Recovery Process in Athabasca McMurray Tar Sands, Husky
1 1	lo 1	Of Company.
L		Total Company.

EXAMINER:

DATE CONSIDERED: 12 13 04

Form PTO-1449 (modified)
List of Patents and Publications
For Applicant's Information
Disclosure Statement

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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

		THE ART (Including Author, Title, Date, Pertinent Pages, Etc.)
CONT	A257	Comparison of Methods for Measuring Kerogen Pyrolysis Rates and Fitting Kinetic Parameters, Burnham et al., Marc
	1	22 1097 (20 nages)
00,4	A 258	Further Comparison of Methods for Measuring Kerogen Pyrolysis Rates and Fitting Kinetic Parameters, Burnham et
1	i ·	al Contember 1087 (16 nages)
·	A259	Tests of a Mechanism for H ₂ S Release During Coal Pyrolysis, Coburn et al., May 31, 1991, (6 pages).
	1260	Kinetic Studies of Gas Evolution During Pyrolysis of Subbituminous Coal, J. H. Campbell et al., May 11, 1976, (14
	L	L
	1 261	Excavation of the Partial Seam Crip Underground Coal Gasification Test Site, Robert J. Cena, August 14, 1987, (11
	A201	pages).
	1 262	Evolution of Sulfur Gases During Coal Pyrolysis, Oh et al., February 3, 1988, (11 pages).
1		
		Coal Pyrolysis and Methane Decomposition In the Presence of a Hot Char Bed, Peters et al., August 1983, (21 pages)
	A 264	Pyrolysis Kinetics and Maturation of Coals from the San Juan Basin, John G. Reynolds & Alan K. Burnham, Decemb
		1992 (30 pages).
	A265	Numerical Model of Coal Gasification in a Packed Bed, A.M. Winslow, April 1976 (27 pages).
		LLL In-Situ Coal Gasification Program, Stephens et al., June, 14, 1976 (12 pages)
	A267	Pyrolysis of Subbituminous Coal as it Relates to In-Situ Coal Gasification, J.H. Campbell, January 17, 1977 (20 page
	A268	The Historical Development of Underground Coal Gasification, D. Olness & D.W. Gregg, June 30, 1977 (60 pages).
	1.0.00	Laboratory Measurements of Groundwater Leaching and Transport of Pollutants Produced During Underground Coal
	A269	Gasification, V.A. Dalton & J.H. Campbell, March 1, 1978 (21 pages).
	1.070	The Hoe Creek II Field Experiment of Underground Coal Gasification, Preliminary Results, Aiman et al., February 27
	A2/0	Ine Hoe Creek II Field Experiment of Orderground Coar Gastronia 1979
 	4 271	1978 (26 pages). Ground-Water and Subsidence Investigations of the LLL In Situ Coal Gasification Experiments, Mead et al, July 17-2
	A271	107P (21 magas)
- -	4 272	to the state of th
	A272	
	4.272	pages). The Use of Tracers in Laboratory and Field Tests of Underground Coal Gasification and Oil Shale Retorting,
		T real-correction at al. Tune 16, 1978 (19 pages)
	A 274	Underground Gasification of Rocky Mountain Coal, D.R. Stephens and R.W. Hill, July 18, 1978 (15 pages).
<u> </u>		
	A275	High-BTU Gas Via In Situ Coal Gasification, Stephens et al., October, 1978 (41 pages).
<u> </u>	A276	A One-Dimensional Model for In Situ Coal Gasification, Thorsness et al., August 25, 1978 (76 pages).
		Control Aspects of Underground Coal Gasification: LLL Investigations of Ground-Water and Subsidence Effects,
	A2//	Mead et al., November 10, 1978 (21 pages).
<u> </u>	1.070	Environmental Controls for Underground Coal Gasification: Ground-Water Effects and Control Technologies, Warre
	I	NAAA 1 P. Ellon Doher March 14 1080 (10 nages)
 	4.270	Results from the Third LLL Underground Coal Gasification Experiment at Hoe Creek, Hill et al., May 20, 1980 (12)
	A2/9	pages).
 -	A 290	The First the Head Creek No. 3 Underground Coal Gasification Experiment, Thorsness et al., May 1980, (11 page
	71200	Steam Tracer Experiment at the Hoe Creek No. 3 Underground Coal Gasification Field Test, C.B. Thorstess, VED
	A281	Steam Tracer Experiment at the Hoe Creek No. 3 Underground Coal Gasification Field 1884 8.18.1 Laddens, V. L.
	l i	November 26, 1980 (51 pages).
	A282	Computer Models to Support Investigations of Surface Subsidence and Associated Ground Missish Inducerting
		Underground Coal Gasification, R.T. Langland & B.C. Trent, July 1981 (16 pages).
		GPOLID 2000

EXAMINER:

DATE CONSIDERED:

12/13/04

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ATTY. DKT. NO. 5659-03300/TH1/\$

APPLICANT: Wellington, et al.

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GROUP: 3672

FILING DATE: April 24, 2001

(Including Author, Title, Date, Pertinent Pages, Etc.)

1 100		THADE
Z (Ø)		Burn Cavity Growth During the Hoe Creek No. 3 Underground Coal Gasification Experiment, R.W. Hill, June 8, 198 (28 pages).
1		The Controlled Retracting Injection Point (Crip) System: A Modified Stream Method for In Site Coal Gasification, R. W. Hill & M.J. Shannon, April 15, 1981 (11 pages).
	1	Coal Block Gasification Experiments: Laboratory Results and Field Plans: C.B. Thorsness & R.W. Hill, July 1981 (23 pages).
	1	Laboratory Scale Simulation of Underground Coal Gasification: Experiment and Theory, J.R. Creighton & (27 pages)
	i	Underground Coal Gasification - A Leading Contender in the Synfuels Industry, D.R. Stephens, October 27, 1981 (42 pages).
		Computer Models to Support Investigations of Surface Subsidence and Associated Ground Motion Induced by Underground Coal Gasification, B.C. Trent & R.T. Langland, August 1981 (40 pages).
	1	The Hoe Creek Experiements: LLNL's Underground Coal Gasification Project in Wyoming, D.R. Stephens, October 1981 (162 pages).
·	A290	Technical Underground Coal Gasification Summation: 1982 Status, Stephens et al., July 1982 (22 pages).
	A291	Review of Underground Coal Gasification Field Experiments at Hoe Creek (34 pages).
	A292	Underground Coal Gasification Using Oxygen and Steam, Stephens et al., January 19, 1984 (37 pages).
	A293	Shale Oil Cracking Kinetics and Diagnostics, Bissell et al., November 1983, (27 pages).
		Mathematical Modeling of Modified In Situ and Aboveground Oil Shale Retorting, Robert L. Braun, January 1981 (4 pages).
	1	Progress Report on Computer Model for In Situ Oil Shale Retorting, R.L. Braun & R.C.Y. Chin, July 14, 1977 (34 pages).
	İ	Analysis of Multiple Gas-Solid Reactions During the Gasification of Char in Oil Shale Blocks, Braun et al., April 198 (14 pages).
	1	Chemical Kinetics and Oil Shale Process Design, Alan K. Burnham, July 1993 (16 pages).
	A298	Reaction Kinetics and Diagnostics For Oil Shale Retorting, Alan K. Burnham, October 19, 1981 (32 pages).
	A299	Reaction Kinetics Between Steam and Oil Shale Char, A.K. Burnham, October 1978 (8 pages).
	A300	General Kinetic Model of Oil Shale Pyrolysis, Alan K. Burnham & Robert L. Braun, December 1984 (25 pages).
 	A301	General Model of Oil Shale Pyrolysis, Alan K. Burnham & Robert L. Braun, November 1983 (22 pages).
	A302	Pyrolysis Kinetics for Green River Oil Shale From the Saline Zone, Burnham et al., February, 1982 (33 pages).
	A303	Reaction Kinetics Between CO ₂ and Oil Shale Char, A.K. Burnham, March 22, 1978 (9 pages front & back).
	1	Reaction Kinetics Between CO ₂ and Oil Shale Residual Carbon. I. Effect of Heating Rate on Reactivity, Alan K. Burnham, July 11, 1978 (11 pages front and back).
	A305	High-Pressure Pyrolysis of Colorado Oil Shale, Alan K. Burnham & Mary F. Singleton, October 1982 (23 pages).
	1	A Possible Mechanism Of Alkene/Alkane Production in Oil Shale Retorting, A.K. Burnham, R.L. Ward, November 2 1980 (20 pages).
		Enthalpy Relations For Eastern Oil Shale, David W. Camp, November 1987 (13 pages).
		Oil Shale Retorting: Part 3 A Correlation of Shale Oil 1-Alkene/n-Alkane Ratios With Column et at., August, 1977 (18 pages).
	A309	The Composition of Green River Shale Oil, Glen L. Cook, et al., 1968 (12 pages).
		1 01/1

EXAMINER: LLUM D. LOTUSON

DATE CONSIDERED:

12/13/04 GROUP 3600

Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information

(Use several sheets if necessar

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GROUP: 3672

FILING DATE: April 24, 2001

OFFICE SERT (Including Author, Title, Date, Pertinent Pages, Etc.)

<u> </u>		And Printer (Including Author) Time, Date, 100 1200, 100
VIII.	0	On-line, Mass Spectrometric Determination of Ammonia From Oil Shale Pyrolysis Using Isobutane Chemical Ionization, Crawford et al., March 1988 (16 pages).
i	1	Thermal Degradation of Green River Kerogen at 150° to 350° C Rate of Production Formation, J.J. Cummins & W.E. Robinson, 1972 (18 pages).
\top	A31	Retorting of Green River Oil Shale Under High-Pressure Hydrogen Atmospheres, LaRue et al., June 1977 (38 pages).
十	A31	Retorting and Combustion Processes In Surface Oil-Shale Retorts, A.E. Lewis & R.L. Braun, May 2, 1980 (12 pages)
+	A31-	Oil Shale Retorting Processes: A Technical Overview, Lewis et al., March 1984 (18 pages).
十	A31	Study of Gas Evolution During Oil Shale Pyrolysis by TQMS, Oh et al., February 1988 (10 pages).
十	A31	The Permittivity and Electrical Conductivity of Oil Shale, A.J. Piwinskii & A. Duba, April 28, 1975 (12 pages).
十	A31	Oil Degradation During Oil Shale Retorting, J.H. Raley & R.L. Braun, May 24, 1976 (14 pages).
+	·	Kinetic Analysis of California Oil Shale By Programmed Temperature Microphyrolysis, John G. Reynolds & Alan K. Burnham, December 9, 1991 (14 pages).
1	A31	Analysis of Oil Shale and Petroleum Source Rock Pyrolysis by Triple Quadrupole Mass Spectrometry: Comparisons o Gas Evolution at the Heating Rate of 10°C/Min., Reynolds et al. October 5, 1990 (57 pages).
	A32	Catalytic Activity of Oxidized (Combusted) Oil Shale for Removal of Nitrogen Oxides with Ammonia as a Reductant in Combustion Gas Streams, Part II, Reynolds et al., January 4, 1993 (9 pages).
十	A32	Fluidized-Bed Pyrolysis of Oil Shale, J.H. Richardson & E.B. Huss, October 1981 (27 pages).
十	A32	Retorting Kinetics for Oil Shale From Fluidized-Bed Pyrolysis, Richardson et al., December 1981 (30 pages).
	A32	Recent Experimental Developments in Retorting Oil Shale at the Lawrence Livermore Laboratory, Albert J. Rothman August 1978 (32 pages).
1	A32	The Lawrence Livermore Laboratory Oil Shale Retorts, Sandholtz et al. September 18, 1978 (30 pages).
十	A32	Operating Laboratory Oil Shale Retorts In An In-Situ Mode, W. A. Sandholtz et al., August 18, 1977 (16 pages).
\top	J	Some Relationships of Thermal Effects to Rubble-Bed Structure and Gas-Flow Patterns in Oil Shale Retorts, W. A. Sandholtz, March 1980 (19 pages).
		Assay Products from Green River Oil Shale, Singleton et al., February 18, 1986 (213 pages).
\top	A32	Biomarkers in Oil Shale: Occurrence and Applications, Singleton et al., October 1982 (28 pages). JAN 0 7 2002
1	t t	Occurrence of Biomarkers in Green River Shale Oil, Singleton et al., March 1983 (29 pages).
1	A33	An Instrumentation Proposal for Retorts in the Demonstration Phase of Oil Shale Development, Cylin Spend 600 April 19, 1977, (34 pages).
	A33	A Laboratory Apparatus for Controlled Time/Temperature Retorting of Oil Shale, Stout et al., November 1, 1976 (19 pages).
	í	SO ₂ Emissions from the Oxidation of Retorted Oil Shale, Taylor et al., November 1981 (9 pages).
	A33	Nitric Oxide (NO) Reduction by Retorted Oil Shale, R.W. Taylor & C.J. Morris, October 1983 (16 pages).
	A33	Coproduction of Oil and Electric Power from Colorado Oil Shale, P. Henrik Wallman, September 24, 1991 (20 pages
\dashv	A33	5 13C NMR Studies of Shale Oil, Raymond L. Ward & Alan K. Burnham, August 1982 (22 pages).
	ł	Identification by ¹³ C NMR of Carbon Types in Shale Oil and their Relationship to Pyrolysis Conditions, Raymond L. Ward & Alan K. Burnham, September 1983 (27 pages).
7	A33	A Laboratory Study of Green River Oil Shale Retorting Under Pressure In a Nitrogen Atmosphere, Wise et al., September 1976 (24% ages).
		DATE CONCIDENCE 10/13/41/

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DATE CONSIDERED: 12/13/04

Form PTO-1449 (modified)
List of Patents and Publications
For Applicant's Information
Disclosure Statement



Randolph Stone & R.W. Hill, September 10, 1980 (62 pages).

ATTY. DKT. NO. 5659-03300/TH

APPLICANT: Wellington, et al.

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Use several sheets if	necessary) FILING DATE: April 24, 2001
<u> </u>	OTRER ART, Cheluding Author, Title, Date, Pertinent Pages, Etc.)
	Quantitative Analysis and Evolution of Sulfur-Containing Gases from Oil Shale Pyrolysis by Triple Quadrupole Mass Spectrometry, Wong et al., November 1983 (34 pages).
	Quantitative Analysis & Kinetics of Trace Sulfur Gas Species from Oil Shale Pyrolysis by Triple Quadrupole Mass Spectrometry (TQMS), Wong et al., July 5-7, 1983 (34 pages).
	Application of Self-Adaptive Detector System on a Triple Quadrupole MS/MS to High Expolsives and Sulfur-Containing Pyrolysis Gases from Oil Shale, Carla M. Wong & Richard W. Crawford, October 1983 (17 pages).
1 1 1	An Evaluation of Triple Quadrupole MS/MS for On-Line Gas Analyses of Trace Sulfur Compounds from Oil Shale Processing, Wong et al., January 1985 (30 pages).
	Source and Kinetics of Sulfur Species in Oil Shale Pyrolysis Gas by Triple Quadrupole Mass Spectrometry, Wong et al., October 1983 (14 pages).
A343	The Centralia Partial Seam CRIP Underground Coal Gasification Experiment, Cena et al., June 1984 (38 pages).
A344 I	Results of the Centralia Underground Coal Gasification Field Test, Hill et al., August 1984 (18 pages).
A345 J	Excavation of the Partial Seam Crip Underground Coal Gasification Test Site, Cena et al., August 14, 1987 (11 pages
1 1	Assessment of the CRIP Process for Underground Coal Gasification: The Rocky Mountain I Test, Cena et al., August 1988 (22 pages).
	Mild Coal Gasification-Product Separation, Pilot-Unit Support, Twin Screw Heat Transfer, and H ₂ S Evolution, Camp et al., August 9, 1991 (12 pages).
A348 [Underground Coal Gasification Site Selection and Characterization in Washington State and Gasification Test Design

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